



PRODUCT DATA SHEET

C6165

4-Port Dual Directional Coupler employs two, 3-Port Uni-Directional Couplers, internally connected, in tandem, providing measurement of both forward and reverse power. Ideal for simultaneously monitoring a system's forward and reverse power and for reflectometer measurements. Unlike the Bi-Directional Coupler, the directivity of the Dual Directional Coupler is unaffected by the loads on the coupled ports.

Features:

High Power Wide Bandwidths Small Size Flat Coupling Custom Designs Available

Electrical Specifications:

Frequency: 1 - 100 MHz
 Power: 100 W CW
 Coupling: 30 ± 1.0 dB Max.
 Flatness: ± 0.2 dB Max.
 Insertion Loss: 0.25 dB Max.
 VSWR (ML): 1.15:1 Max.
 Directivity: 25 dB Min.

Mechanical Specifications:

Type: Connectorized
 Material: Aluminum 6061-T6
 Surface Finish: Chem. Film Per MIL-DTL-5541F
 Type I Class 3 (Yellow Iridite)
 RoHS Compliant Available
 Operating Temperature: -55°C to +75°C
 Storage Temperature: -60°C to +85°C
 Humidity: 95% Non-Condensing
 Size: 4.0 x 2.0 x 1.88"

Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C6165-10	N Female	N Female	N Female	N Female
C6165-12	N Female	N Female	SMA	SMA
C6165-13	N Female	N Female	BNC	BNC
C6165-102	SMA	SMA	SMA	SMA
C6165-200	BNC	BNC	BNC	BNC
C6165-202	BNC	BNC	SMA	SMA

Werlatone® Broadband Dual, Uni, and Bi Directional RF Couplers are designed to tolerate the most stringent operating conditions associated with military and EMC testing environments. Many of our RF Directional Couplers, designated Mismatch Tolerant®, will operate continuously, at rated power, into a severe load mismatch condition. Our multi-octave Directional Couplers maintain exceptional coupling flatness, directivity, VSWR, and insertion loss.

Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.

Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

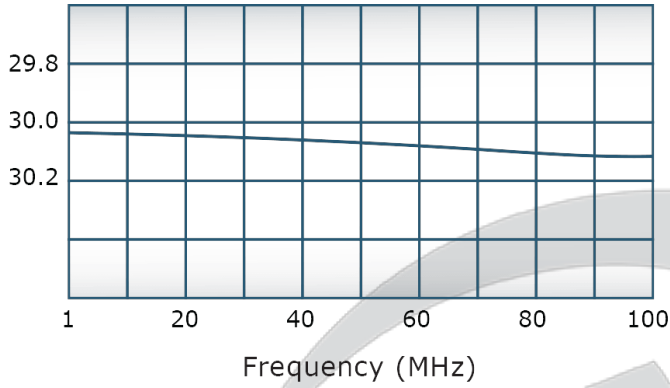


PRODUCT DATA SHEET

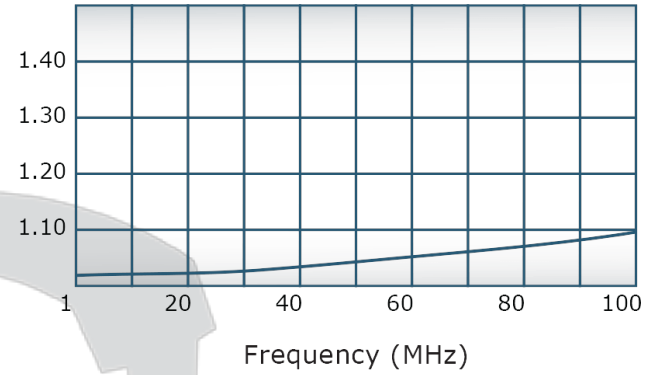
C6165

Performance Data (Specifications subject to change without notice):

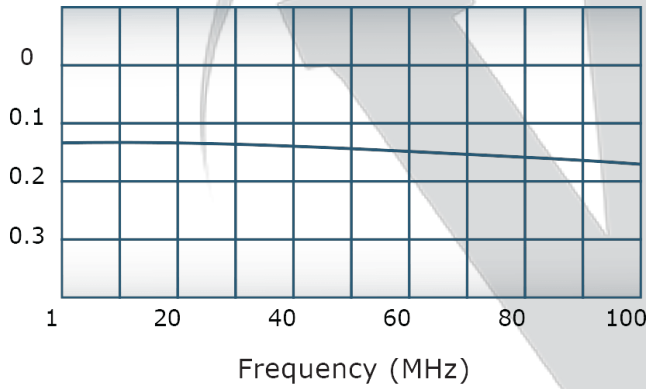
Coupling:



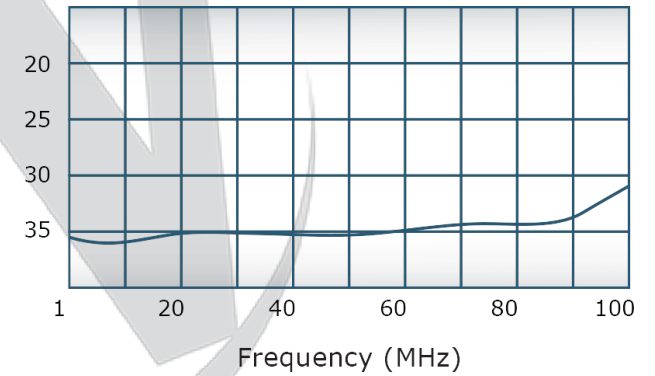
VSWR:



Insertion Loss:



Directivity:



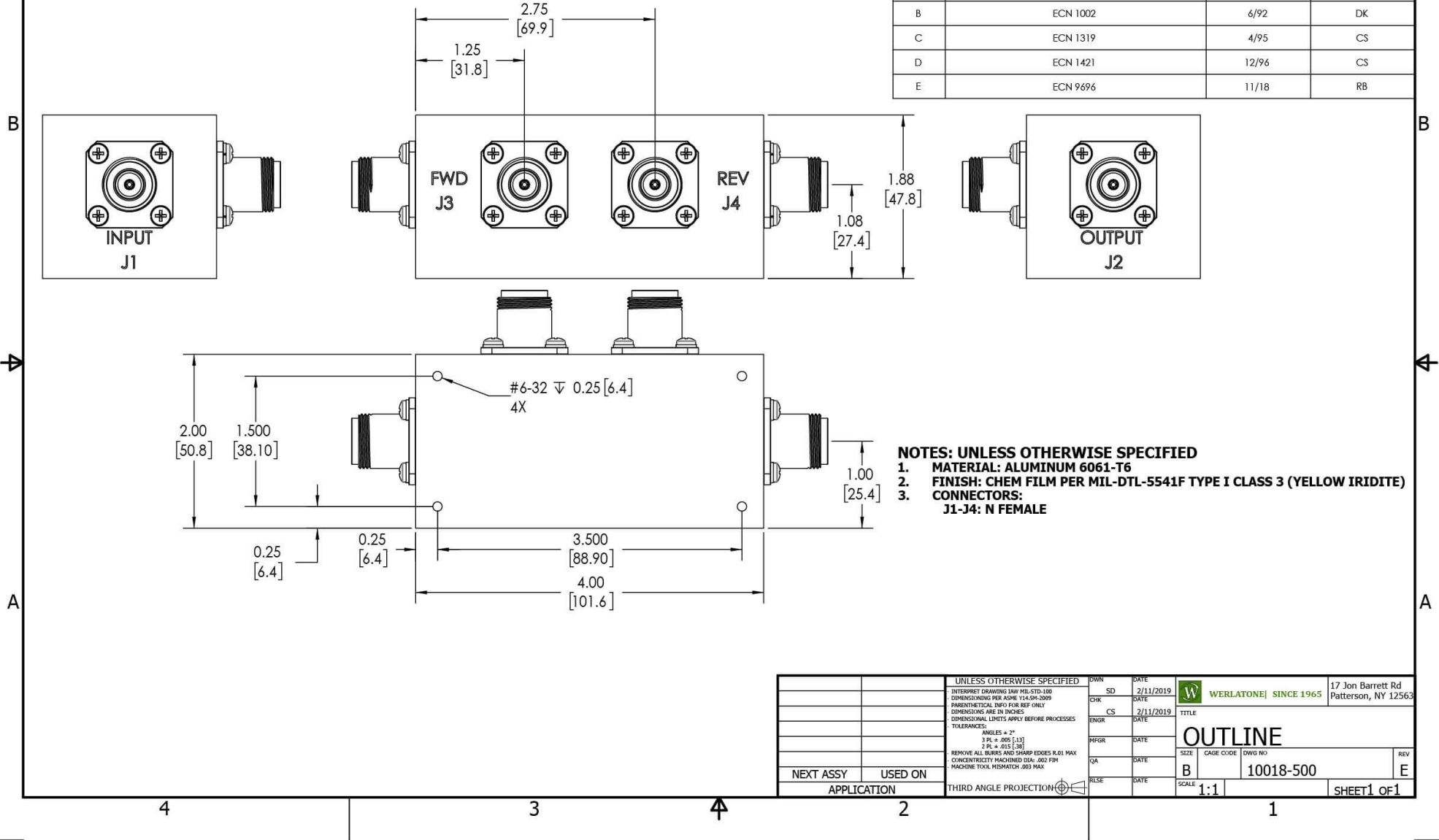
Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of

Werlatone, Inc.

Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

RESTRICTION ON USE, DUPLICATION OR DISCLOSURE OF PROPRIETARY INFORMATION
 This document contains proprietary information which is the sole property of Werlatone, Inc.

REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 1001	10/86	GW
B	ECN 1002	6/92	DK
C	ECN 1319	4/95	CS
D	ECN 1421	12/96	CS
E	ECN 9696	11/18	RB



- NOTES: UNLESS OTHERWISE SPECIFIED**
- MATERIAL: ALUMINUM 6061-T6**
 - FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)**
 - CONNECTORS:
J1-J4: N FEMALE**

UNLESS OTHERWISE SPECIFIED		DATE	17 Jon Barrett Rd
INTERRUPT DRAWING IAW MIL-STD-100	SD	2/11/2019	Patterson, NY 12563
DIMENSIONS PER ASME Y14.5M-2009	CHK	DATE	
PARENTHEetical INFO FOR REF ONLY	CS	2/11/2019	
DIMENSIONS ARE IN INCHES	ENGR	DATE	
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES	INFR	DATE	
TOLERANCES:	QA	DATE	
ANGLES ± 2°	RLSE	DATE	
3 PL ± .005 [0.13]			
2 PL ± .015 [0.38]			
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX			
CONCENTRICITY MACHINED DIA: .002 FIM			
MACHINE TOOL MISMATCH .003 MAX			
NEXT ASSY	USED ON		
APPLICATION	THIRD ANGLE PROJECTION		
		DATE	
		SCALE	1:1
		SIZE	B
		CAGE CODE	10018-500
		DWG NO	
		REV	E
			SHEET 1 OF 1

Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.
 Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com